

REMARKS

Claims 1-14 are pending.

Applicants' Response to the Rejections Under 35 U.S.C. §103

Claims 1-9, 12 and 13 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Kato et al.* in view of *Watada et al.*, claims 10 and 11 were rejected under 35 U.S.C. §103(a) over *Kato et al.* in view of *Watada et al.* and further in view of *Tokuda et al.*, and claims 13 and 14 were rejected under 35 U.S.C. §103(a) over *Kato et al.* in view of *Watada et al.* and further in view of *Ogasawara al.*

In regard to claims 1-9, 12 and 13, Applicants respectfully submit that the combined references fail to teach all the limitations of the present invention. *Kato et al.* only provides a crystal layer of cobalt oxide containing sodium for coating of nickel hydroxide particles. *Watada et al.* only discloses a metal element such as zinc or tungsten contained in a particle fine hole of the nickel hydroxide. These two cited references do not disclose that a conductive layer comprising sodium-containing cobalt oxide is formed on a surface of the nickel hydroxide particles and tungsten powder and/or tungsten compound powder is added to the nickel hydroxide particles as disclosed in the present application. Furthermore, there is no disclosure in these cited references that charge/discharge cycle performance was extremely improved by combining the above-mentioned two factors as disclosed in Table 1 of the present application.

Further, one of the purposes of the present invention is to improve charge/discharge cycle performance under high temperature while *Watada et al.* aims to

provide a nickel electrode excellent in charging efficiency at the time of high temperature by containing tungsten, for example, in the nickel hydroxide as stated in the Office Action, page 4, lines 1-5.

Kato et al. discloses nickel hydroxide containing Co and Zn in column 11, lines 50-65. However, in its example, Co and Zn were incorporated as solid solution in the nickel hydroxide. Therefore, even if substituting tungsten in place of Co or Zn, the condition of tungsten of the present invention is not the same as that of *Kato et al.*, since tungsten is present as powder and/or its compound powder in the present invention. Wherefore, favorable reconsideration is requested.

Watada et al. discloses that a metal element such as zinc or tungsten is contained in a particle fine hole of the nickel hydroxide, and the particle diameter and its amount to be added of zinc or tungsten are determined by the size of the particle fine hole of the nickel hydroxide. The present application teaches that a conductive layer comprising sodium-containing cobalt oxide is formed on a surface of the nickel hydroxide particles and tungsten powder and/or tungsten compound powder is added to the nickel hydroxide particles, and the particle diameter and the amount to be added of the tungsten powder and/or its compound powder are not determined by the size of the particle fine hole of the nickel hydroxide.

The present invention per claims 4 and 5 is directed to a specific range of weight and size for the tungsten element. These ranges, as demonstrated in Tables 4 and 5 of the specification, have a relatively narrow scope and indicate surprising results as to capacity characteristics and charge/discharge cycle performance. Applicants respectfully submit that one skilled in the art would not have a reasonable expectation of success by

combining the metal elements of *Watada et al.* with the sodium-cobalt oxide crystal layer of *Kato et al.*, because the results of the narrow range claimed in claims 4 and 5 are surprising results. The reasons of determination of the particle diameter and the amount to be added of the tungsten powder and/or its compound powder are explained in paragraphs [0027] to [0028] and its effects are indicated in Tables 4 and 5 in the present specification. In contrast, there are no such results disclosed in *Watada et al.* Therefore, Applicants respectfully submit that it would not have been routine experimentation to discover the ranges in the present claims 4 and 5 based on the teachings of *Watada et al.* Wherefore, favorable reconsideration is requested.

Applicants respectfully submit that claims 10 and 11 being dependent on claim 1 are also patentable in view of the above-mentioned arguments. In specific regard to claims 10 and 11, the Office Action asserts that it would be likely for one skilled in the art to discover the addition of yttrium as disclosed in the present application with the disclosure of Y_2O_3 of *Tokuda et al.* Applicants further respectfully traverse on the grounds that one skilled in the art would not have been motivated by the teachings of *Tokuda et al.* to make the combination.

The effect of *Tokuda et al.* is related to a lesser reduction of the active material utilization factor when charged at high temperature, while that of the present invention relates to improvement of charge/discharge cycle performance under high temperature as disclosed in Table 6 in paragraph [0095].

In view of the above-mentioned reasons, the effect of the present invention is different from that of the above-mentioned references. Hence, one skilled in the art, not

being motivated nor taught by *Tokuda et al.* to expect the results of the present invention, could not have a reasonable expectation of success.


In regard to claims 13 and 14, Applicants respectfully submit that based on their dependency to claim 1, they also are considered by the above remarks in regard to claim 1.

For at least the foregoing reasons, it is believed that this application is now in condition for allowance. If, for any reason, it is believed that this application is not in condition for allowance, Examiner is encouraged to contact the Applicants' undersigned attorney at the telephone number below to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 50-2866.

Respectfully submitted,

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